REMARKS

Claims 1-4 have been examined and have been rejected under 35 U.S.C. § 103(a).

I.   Rejections under 35 U.S.C. § 103(a) in view of U.S. Patent No. 5,060,515 to Kanda et al. ("Kanda") and WO 00/01099 to Hofmann ("Hofmann"), where U.S. Publication No. 2001/0005176 is being used as an English translation of Hofmann.

The Examiner has rejected claims 1, 3 and 4 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kanda in view of Hofmann.

A.   Claim 1

Claim 1 recites, *inter alia*, that a differential detector obtains real parts of products of complex conjugate numbers of respective elements of the cross correlation coefficients. The real parts are output as differential detection cross correlation coefficients.

On page 2 and 3 of the current Office Action, the Examiner maintains that column 7, lines 31-34, discloses the claimed differential detector. The cited portion of Kanda, which happens to be claim 1 of Kanda, merely recites a difference detecting means for detecting a difference between current input frame image signals and immediately preceding frame image signals. Thus, the difference detecting means merely detects a difference between the signals of the image frames (i.e., Dn-Dn-1) (col. 3, lines 4-8). As further recited in claim 1 of Kanda, the difference detecting means forms a part of the coefficient outputting means (i.e., coefficient output circuit 15). Accordingly, the difference detecting means of Kanda is used to calculate the predetermined correlation coefficient. On the other hand, the differential detector of the present

invention obtains real parts of products of complex conjugate numbers of respective elements of

the cross correlation coefficients, etc., where the cross correlation coefficients have <u>already</u> been

determined.

Accordingly, contrary to the teachings of Kanda, the differential detector of the present

invention manipulates the correlation coefficients <u>already</u> calculated. For at least this reason,

Applicant submits that Kanda fails to teach or suggest the claimed differential detector.

In addition to the above, the cited portion of Kanda fails to disclose the specific features

of the claimed differential detector, where only the "real parts" of the coefficients are output as

differential detection cross correlation coefficients.

Claim 1 also recites an averager for averaging the differential detection cross correlation

coefficients outputted from the differential detector.

As stated above, Kanda fails to disclose the claimed differential detector. Accordingly,

the averaging circuit 47 of Kanda likewise fails to teach or suggest the claimed averager that

receives coefficients output from the differential detector.

Finally, claim 1 recites a peak detector that detects one or plural peak values from the

averaged cross correlation coefficients.

The Examiner maintains that column 7, lines 35-37 (i.e., the detecting means) discloses

the above feature (pg. 3 of Office Action). Similar to Kanda's difference detecting means

discussed above, however, the detecting means of lines 35-37 forms a part of the coefficient

outputting means 15. The maximum value detected in Kanda is the maximum value of the

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differences obtained by the difference detecting means for originally calculating a coefficient.

Thus, for at least this reason, the detecting means of Kanda fails to teach or suggest the claimed

peak detector.

Based on the foregoing, and since Hofmann fails to cure the above deficient teachings of

Kanda, Applicant submits that claim 1 is patentable over the cited references. In addition,

Applicant incorporates herein all arguments presented in the July 13, 2005 Amendment.

B.   Claims 3 and 4

Since claims 3 and 4 are dependent upon claim 1, Applicant submits that such claims are

patentable at least by virtue of its dependency.

In addition, Kanda fails to teach or suggest the use of a standard deviation of the

averaged cross correlation coefficients, or the use of the standard deviation for the averaged

cross correlation coefficients except the peak values, as recited in claim 4. Since Hofmann fails

to cure the deficient teachings of Kanda, Applicant submits that claim 4 is patentable is over the

cited references.

II.   Rejections under 35 U.S.C. § 103(a) in view of Kanda, Hofmann and U.S. Publication No. 2003/0031195 to Okawa et al. ("Okawa").
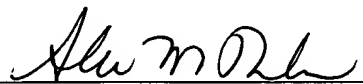
The Examiner has rejected claim 2 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kanda, Hofmann and Okawa. However, since claim 2 is dependent upon claim 1, and Okawa fails to cure the deficient teachings of Kanda and Hofmann, in regard to claim 1, Applicant submits that such claims are patentable at least by virtue of their dependency.

III.   Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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